

# **ENVIRONMENTAL ASSESSMENT**

## **202L/US60 TRAFFIC INTERCHANGE**

### **EXECUTIVE SUMMARY**

#### ***Background and Purpose***

The purpose of this Environmental Assessment (EA) is to objectively identify and present potential environmental impacts that could result from this project and to identify measures that would mitigate those impacts. The EA supplements a Final Environmental Impact Statement (FEIS) approved in 1999.

The design of the Traffic Interchange (TI) connecting the 202L with US60 is being updated to meet the most current design standards and traffic volumes projected by the Maricopa Association of Governments (MAG) for Design Year 2025. To accomplish this, 18 alternative designs were studied and three were chosen for further review. These design alternatives were developed to:

- Provide adequate capacity to meet the traffic volumes projected for 2025;
- Replace the original “loop” ramps shown in the 1999 FEIS with “directional” ramps that would provide the desired operational efficiencies;
- Straighten the curvature in the 202L immediately north of the 202L/US60 TI to meet the latest design standards;
- Extend the project limits to Power Road and Crismon Road to provide the additional area needed for directional ramp connections;
- Incorporate in the TI design the ability to provide future High Occupancy Vehicle (HOV) lanes and for a possible future HOV ramp connection between US60 (east of 202L) and 202L (south of US60);
- Provide necessary modifications to the US60 TIs at Sossaman Road and Ellsworth Road; and,
- Evaluate the need for a planned TI at 202L and Baseline Road to meet projected 2025 traffic volumes.

#### ***Design Alternatives***

Through an initial screening, it was determined that the design alternatives would impose additional impacts on the surrounding community that were not anticipated in the 1999 FEIS. Therefore, the Arizona Department of Transportation (ADOT) and the Federal Highway Administration (FHWA) determined that the FEIS should be updated to support the new design concepts, and to address possible additional environmental impacts.

The three design alternatives (identified as Alternative “A,” Alternative “B,” and Alternative “C”) selected for further review are similar in most respects. Each would include directional ramp lanes necessary to safely accommodate future traffic demands and would eliminate operational concerns associated with the design considered in the 1999 FEIS. There are differences, however, in the degree of access each would provide to US60 from Ellsworth Road and Sossaman Road.

Alternative “A” includes “half-diamond” TIs at Ellsworth Road and Sossaman Road that would provide access to US60 only to and from the east at Ellsworth Road and to and from the west at Sossaman Road.

Alternative “B” provides a “full diamond” TI at Ellsworth Road, with access to US60 to the east and west, while maintaining the half-diamond TI at Sossaman Road.

Alternative “C” provides “full diamond” TIs at both Ellsworth Road and Sossaman Road, with full east and west access to US60.

Alternative “A” would provide the most efficient traffic operational characteristics for the 202L, US60 and the 202L/US60 TI. Alternative “B” and Alternative “C” would be less efficient due to the additional ramp connections that would be included at Ellsworth and Sossaman roads.

## ***Impacts on Surrounding Community***

### ***Air Quality***

Each of the three alternatives was evaluated for potential air-quality impacts. It was determined that none of the alternatives would result in a violation of federally established air quality standards. There was no substantial difference among the alternatives with regard to their potential impact on existing air quality.

### ***Noise***

A traffic noise analysis was conducted to determine potential impacts on neighboring communities. It was determined that noise levels would exceed the ADOT standard of 64 decibels in a number of locations, regardless of the alternative. Therefore, noise barriers will be constructed at various locations throughout the project to reduce the anticipated noise. The analysis found no significant difference among the three alternatives in the anticipated noise levels or proposed noise barrier locations.

### ***Visual Impact***

Each of the alternatives would result in a visual impact on the surrounding area. The TI would be approximately 75 feet high at its highest point at the center of the TI. While most views from residences in the surrounding communities are limited, some are afforded distant views of the surrounding mountains. The elevated sections of the TI may obstruct such views. Methods of mitigating the visual impact of the project include landscaping, blending structures into surrounding landscape to the extent possible, and the use of materials for structures such as bridges, retaining walls and noise barriers that would use materials with colors and textures similar to the surrounding landscape. ADOT will investigate ways to reduce the impact of freeway lighting on adjacent residences.

### ***Drainage***

Drainage features will be incorporated in the design of the TI to handle storm runoff and to prevent flooding in the area to the extent possible.

### ***Construction Impacts***

Construction activities would have a temporary impact on businesses and residences in the study area. During construction, motorists traveling on US60 and people living and working in the surrounding area could experience temporary inconveniences associated with traffic delays, detours and construction dust and noise. These impacts would be minimized by the enforcement of local and state government specifications, ordinances and regulations. Access would be maintained during construction and construction activities that substantially disrupt traffic would not be performed during peak travel periods. Before construction begins, an approved dust control plan would be obtained from Maricopa County. The permit would describe measures to control dust and other pollutants during construction.

### ***Schools***

None of the alternatives would impact neighborhood access to schools in the area.

### ***Emergency Services***

The alternatives may increase emergency response times on US60 between Sossaman and Ellsworth roads. It is anticipated that these impacts would be minimized by the identification and use of alternate routes. Coordination with the City of Mesa and Rural Metro is ongoing with respect to emergency access.

### ***Travel Patterns***

The completion of the 202L mainline and the 202L/US60 TI would cause a substantial change in the travel patterns and in traffic volumes for the arterial streets located adjacent to the freeway. Once the 202L opens to traffic, the parallel arterial streets located near the freeway would experience a decrease in traffic volume, since the majority of the regional trips would shift from the arterial streets to the freeway.

### ***Other***

It was determined that the project would have no impact on any species protected by either the state or federal government and that no publicly owned parks, recreation areas, wildlife or waterfowl refuge or significant historic sites are located in the study area

## ***Right-of-Way Acquisition***

Each of the alternatives would require the acquisition of right-of-way in neighborhoods adjacent to the project. An acquisition and relocation assistance program will be conducted in accordance with state and federal law. The program will identify the process procedure and time frame for right-of-way acquisition and relocation of affected residents or businesses. If necessary, specific relocation plans will be developed to assist residents of displaced mobile homes to find alternative sites for their mobile homes.

The following table shows the right-of-way that either has been acquired or will be acquired by ADOT to complete each of the three design alternatives. (These numbers are estimates and are subject to change depending on the final design of the project.)

<b>AREA</b>	<b>ALTERNATIVE "A"</b>	<b>ALTERNATIVE "B"</b>	<b>ALTERNATIVE "C"</b>
Broadway Rd. to Southern Ave.	85.6 acres	85.6 acres	85.6 acres
Southern Ave. to US60	68.8 acres	68.8 acres	70.2 acres
US60 to Baseline Rd.	74.4 acres	87.0 acres	93.2 acres
Baseline Rd. to Elliot Rd.	126.8 acres	126.8 acres	126.8 acres
<b>TOTAL</b>	<b>355.6 acres</b>	<b>368.2 acres</b>	<b>375.8 acres</b>

## ***Residential Displacements***

The following table showed the number of residences that would be displaced by completion of each of the design alternatives.

<b>COMMUNITY/AREA</b>	<b>ALTERNATIVE "A"</b>	<b>ALTERNATIVE "B"</b>	<b>ALTERNATIVE "C"</b>
Valle del Oro	23	23	23
East of Hawes, north of Guadalupe Rd.	2	2	2
Hopi Ave. between Sossaman and Palo Verde	17	22	22
Casa Mia	4	4	11
Silverridge	0	0	29
88 <sup>th</sup> Street between Pueblo and Emilita	10	10	10
Sossaman/Inverness	0	2	2
Crescent Run	158	158	158
<b>TOTALS</b>	<b>214</b>	<b>221</b>	<b>257</b>



## **Preliminary Right-of-Way and Construction Costs**

*(based on summer 2001 estimates)*

### **Alternative “A”**

Right-of-Way: \$34,000,000  
Construction: \$184,420,000  
Total: \$218,420,000

### **Alternative “B”**

Right-of-Way: \$36,000,000  
Construction: \$189,830,000  
Total: \$225,830,000

### **Alternative “C”**

Right-of-Way: \$40,200,000  
Construction: \$206,240,000  
Total: \$246,440,000

## **Public Involvement**

An extensive public involvement program was implemented by ADOT to inform the public about the project, respond to issues and concerns and elicit input from residents of the surrounding community. The public involvement program included:

- Two general public meetings attended by approximately 500 people.
- More than 20 neighborhood meetings with communities directly surrounding the TI. Approximately 3000 people have attended these meetings held at each key milestone of the study to gather input from citizens in the area.
- Two project newsletters, each distributed to about 18,000 people in the area, to update residents on the progress of the study.
- Two special neighborhood newsletters, each with a distribution of about 8,000.
- A “mail-back” postcard/door hanger distributed to about 18,000 to obtain summer mailing addresses for winter visitors living in the area.
- Informational materials pertaining to preferred alternatives, air quality, noise, and other topics of interest to people.
- A 24-hour telephone information line, which has received more than 200 phone calls.
- A project website, which is updated regularly.
- Two project videos for use at public meetings and by citizens and groups who have requested it.

A Citizens Advisory Team (CAT) was established, with representatives of each of the communities in the immediate vicinity of the project. The CAT acts in an advisory capacity and as a conduit of information between the project team and surrounding neighborhoods. At its June 27 meeting, the CAT reached a consensus in favor of Alternative “B.”

## ***General Project Schedule***

The current ADOT Five-Year Highway Construction Program for Fiscal Years 2001-2005 includes construction of the 202L/US60 TI. It is scheduled for construction completion in 2007. The Current Regional Freeway System Life-Cycle Construction Program projects the following schedule for completion of projects near the 202L/US60 TI:

- 202L – University Drive-US60: October 2005-September 2007
- 202L – US60-Baseline Road: January 2004-December 2005
- 202L – Elliot Road-Baseline Road: January 2004-December 2005

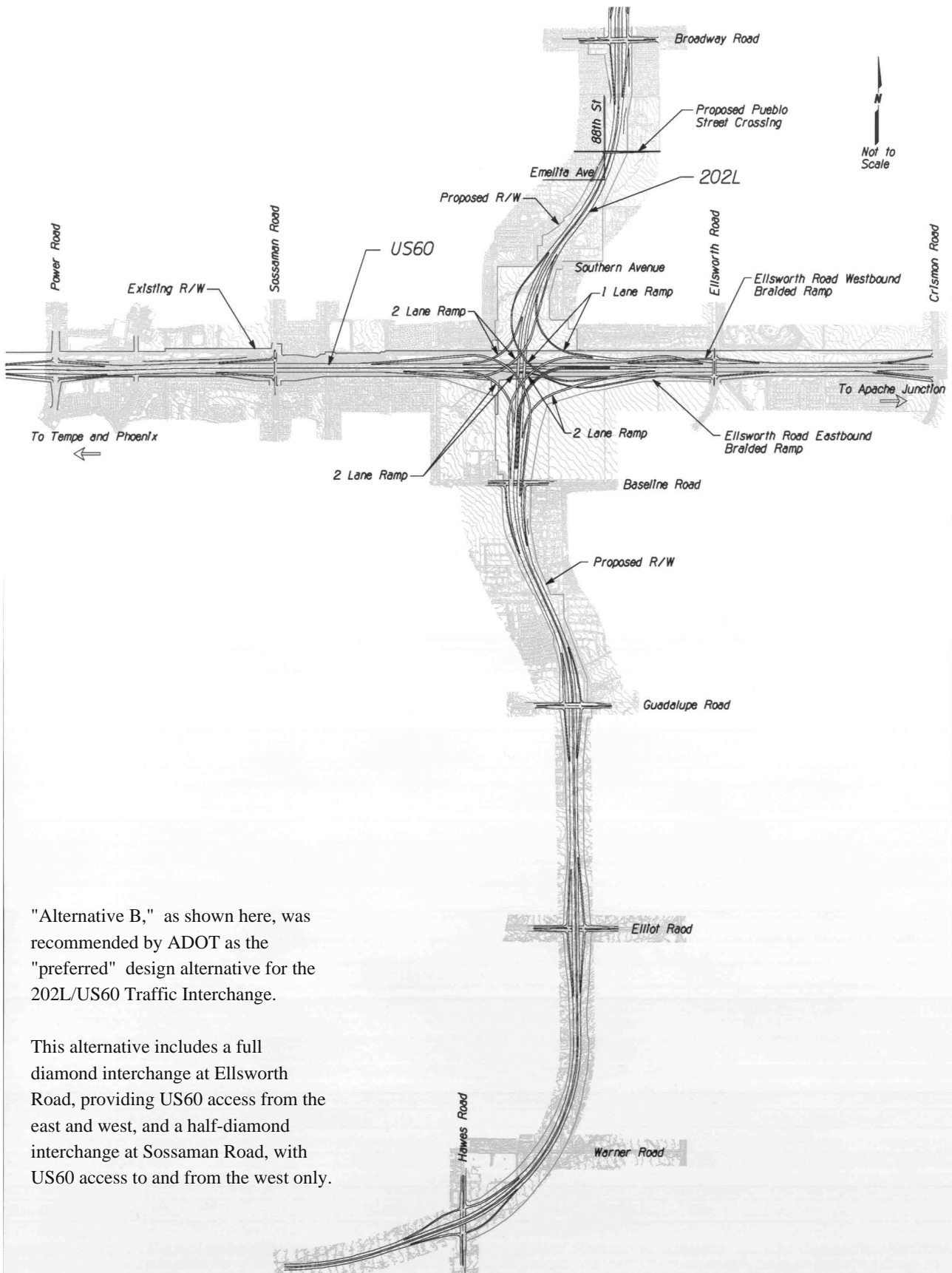
## ***Preferred Alternative***

On August 8, 2001, representatives of ADOT, MAG, and the FHWA met to decide on a preferred alternative. The criteria used to make that decision included:

- The design of the roadway
- Traffic operational characteristics
- Local access to US60
- Redistribution of traffic to the local arterial street system
- Right-of-way needs
- Environmental impacts
- Estimated construction cost
- Recommendations of the CAT and the city of Mesa

Based on these criteria, the decision was made to recommend “Alternative B” as the preferred alternative for the 202L/US60 TI. (Please see illustration on page 7.)

## Alternative B



"Alternative B," as shown here, was recommended by ADOT as the "preferred" design alternative for the 202L/US60 Traffic Interchange.

This alternative includes a full diamond interchange at Ellsworth Road, providing US60 access from the east and west, and a half-diamond interchange at Sossaman Road, with US60 access to and from the west only.